查询NJL25V供应商

INFRARED REMOTE CONTROL RECEIVER

■ GENERAL DESCRIPTION

NJL25V/28H000 series are small and high performance receiving devices for infrared remote control system.
They can operate under low and wide supply voltage (2.7V to 5.5V). NJL25V/28H000 series are mesh window type to improve EMI characteristic. Even under strong EMI noise condition such as TV, Air-conditioner, etc., NJL25V/28H000 series can work normally.

■ FEATURES

1. Wide and low supply voltage 2.7V to 5.5V
2. Low supply current 0.56mA max.
3. Metal case type with mesh window
4. Line-up for various center carrier frequencies

■APPLICATIONS

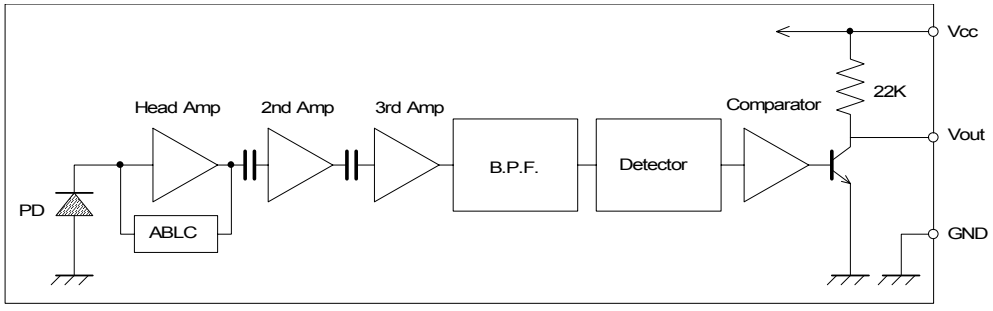
1. AV instruments such as Audio, TV, VCR, CD, MD, DVD, STB etc.
2. Home application such as Air-conditioner, Fan etc.
3. Battery operated instruments such as Toy, Camera etc.

■ LINE-UP

View Type	Side	Top
Height / Carrier Frequency	15.6mm	15mm
fo= 36 kHz	NJL25V360	NJL28H360
36.7 kHz	NJL25V367	NJL28H367
38 kHz	NJL25V380	NJL28H380
40 kHz	NJL25V400	NJL28H400

Regarding the other frequency or packages, please contact to New JRC individually.

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	Vcc	6.3	V
Operating Temperature Range	Topr	-30 to +80	°C
Storage Temperature Range	Tstg	-40 to +85	°C
Soldering Temperature	Tsol	260 (5sec. 4.0mm from mold body)	°C

■ RECOMMENDED OPERATING CONDITION

Supply Voltage Range V_{CC} 2.7 V to 5.5V

■ ELECTRO-OPTICAL CHARACTERISTICS (Vcc=3.3V,Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Supply Current	Icc	No Signal Input	—	—	0.56	mA
Transmission Distance	Lc	Direction of Ray Axis *1	10	15	—	m
Directivity	θL	Angle of half Lc, Horizontal *2	—	45	—	deg
	θV	Angle of half Lc, Vertical *2	—	30	—	deg
Output Voltage Low	VL	No Load	—	0.2	0.5	V
Output Voltage High	VH	No Load	2.8	—	—	V
Low Level Pulse Width	TwL	See Test Circuit	400	—	850	μs
High Level Pulse Width	TwH	See Test Circuit	350	—	800	μs
Center Frequency	fo	See Line-up	36.0	—	40.0	kHz

Note *1:Test with each center carrier frequency under the test condition shown below.

*2:Place major axis of elliptic lens in horizontal direction and minor vertical.

■TEST METHOD

Test condition is as follows:

(1) Standard transmitter:

Transmitting waveform is shown in Fig.1
Transmitting power should be adjusted so that output voltage Vout will be 400mVp-p.(Test circuit is shown in Fig.2)
Regarding IR LED used for transmitter,
λp=940nm, Δλ=50nm.
Regarding photo diode,
Sensitivity S=26nA/Lx
in case light source temperature2856°K,
Ee=100Lx, VR=5V

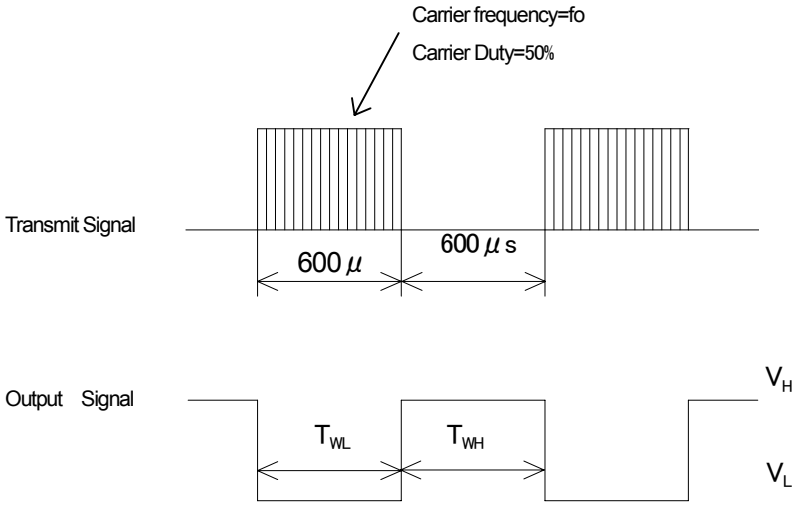


Fig.1 TRANSMITTER WAVE FORM

(2) Test system: Shown in Fig.3.

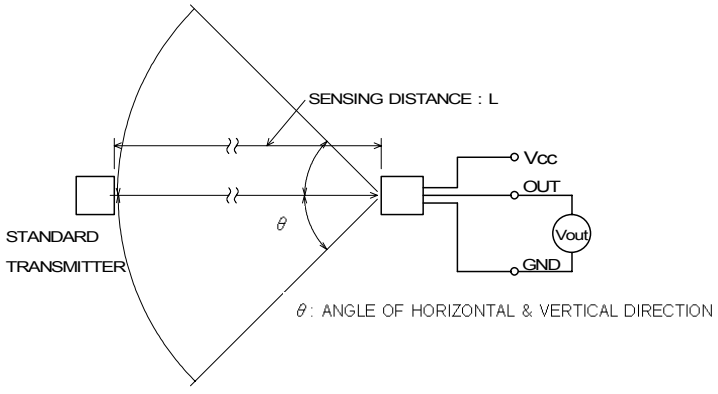


Fig.3 TEST SYSTEM

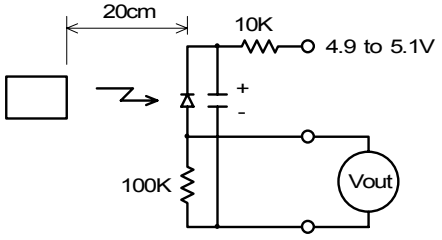


Fig.2 STD.TRANSMITTER TEST CIRCUIT

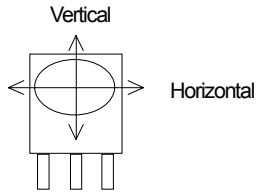
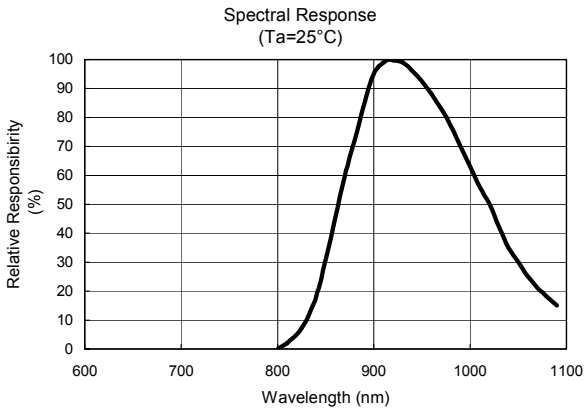
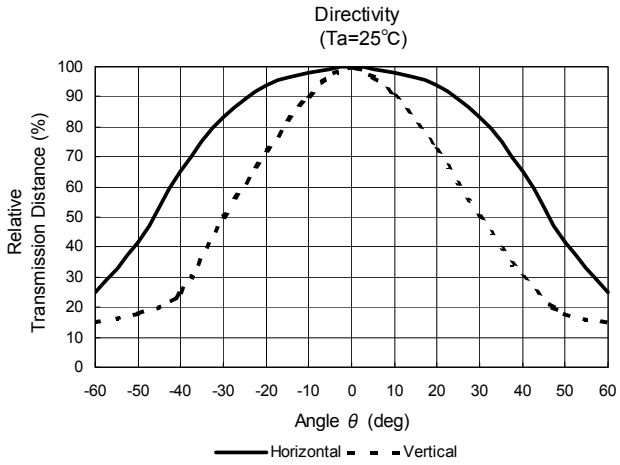


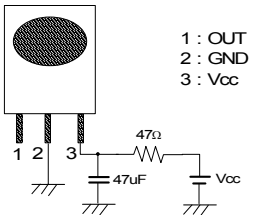
Fig.4 DIRECTIVITY

■ TYPICAL CHARACTRISTICS



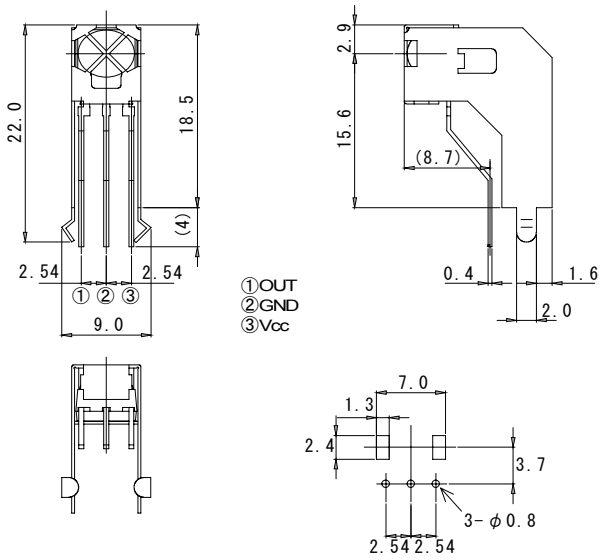


■ RECOMMENDED APPLICATION CIRCUIT



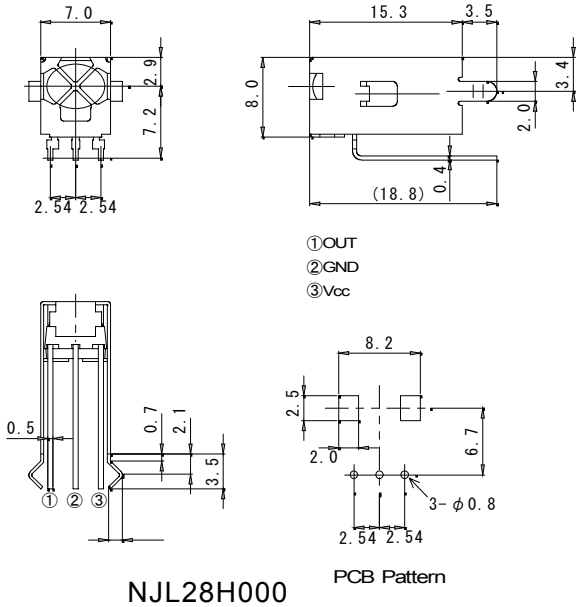
RC Filter should be connected closely between Vcc pin and GND pin.

■ OUTLINE



NJL25V000
UNIT:mm

PCB Pattern



NJL28H000
UNIT:mm

PCB Pattern

1. Tolerance is ±0.3mm unless otherwise noted.
2. Ground metal case on PCB. Metal case is not connected to GND pin inside.Tolerance is ±0.3mm unless otherwise noted.

[CAUTION]
The specifications on this databook are only given for information , without any guarantee as regards either mistakes or omissions. The application circuits in this databook are described only to show representative usages of the product and not intended for the guarantee or permission of any right including the industrial rights.